

ATTACHMENT A

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In Application Serial No. 10/066,486
Filed January 31, 2002

DECLARATION OF SRINIVAS KANDALA UNDER 37 CFR 31.132

I, Srinivas Kandala, Ph.D., hereby declare as follows:

1. My residence address is 19005 SE 19th Way, Vancouver, WA 98683.
2. Since November 22, 1996 I have been employed by Sharp Laboratories of America, Inc. ("SLA"), 5750 N.W. Pacific Rim Boulevard, Camas, Washington 98607. My title at SLA, since October 30, 2002, is Senior Engineer/Researcher. My responsibilities include the development of technology for Home Networks.
3. I have read the claims for the patent application in question, Mansfield et al., Serial Number 10/066,486 (the Applicant). I have read the relevant parts of the Office Action dated August 10, 2004, where claims 1-45 have been rejected as obvious with respect to US Patent 4,899,372 (Wahi) and US Patent 6,252,952 (Kung). In summary, it is my opinion that the cited references do not make obvious amended claims 1-2, 4-11, 13-33, 35-36, and 39-54.
4. Wahi describes a POTS lockout system. In Wahi's system, all phones are electrically connected for the transmission of analog signals, and an analog circuit can be used to create electrical isolation between the phones and the external circuit (external lines). Unlike the claimed invention gateway, Wahi's isolation circuitry is embedded in each

individual telephone, not at a central device that bridges all internal lines to external lines. Because of the differences in structure, Wahi cannot perform the same functions as the claimed invention.

It can be seen from studying Wahi's Fig. 1, that by engaging the y/b lines, a user can disconnect extension phones. However, there is no selective control. The extension phones are either all disabled, or all enabled. Therefore, I do not consider Wahi an example of a telephone system that can selectively exclude, or make bridges home network endpoints to an external telephone line, in response to selecting public and privacy mode options. Further, in the rejection of claim 18 (page 6 of the Office Action), the Examiner states that conventional telephones permit selective bridging. However, I am unaware of any telephone systems that permit the type of selective bridging described in the claimed invention. That is, with respect to claims 1 and 23, I am unaware of any telephone system that permits either a public or private mode option to be selected with respect to particular external telephone lines (telephone numbers). As explained in more detail below (Section 7), this means that public/privacy mode options can be selected for a particular endpoint with respect to multiple telephone numbers.

5. Kung's patent is primarily concerned with the behavior of network infrastructure, as opposed to a residential gateway, or the behaviors between the residential gateway and the customer premise equipment (CPE) 102. For example, Figs 5 and 6 describe signaling and connection procedures from the residential gateway (BRG) 300, to the infrastructure part of the network. That is, the signaling described is between the gateway device and parts of the service provider's network. No signal diagrams explain signaling within the CPE. In contrast, the claimed invention deals with the signaling

within a home (CPE), from the gateway to the in-home devices (endpoints). The infrastructure covered in Kung, is out of scope of the claimed invention.

Fig. 3 of Kung describes the residential gateway. The general class of services are presented that may be offered residential gateway. In columns 18 and 19 Kung briefly notes that an Intercom Module (IM) may be permit devices, such as phones, to be used as intercoms. A controller can be used to configure intercom paths. Further, the IM can be used to enable services such as extension transfer and call conferencing. However, Kung provides no details as to how these services are to be provided. For example, there are no diagrams such as Fig. 5 and 6 to describe the signaling with the CPE.

6. In summary, Kung describes a gateway that is able to mimic the performance of a conventional private branch exchange (PBX) telephone system, where a plurality of CPE telephones are connected to a plurality of external telephone lines. Typically, a PBX system is a subscriber-owned telecommunications exchange that has access to a public switched network. A PBX system, established in a business office for example, is able to transfer and conference calls between different extensions. However, even if Kung did describe how his residential gateway enables these PBX functions, these functions are very different from the public and privacy mode functions described in the claimed invention.

7. One major difference between Kung and the claimed invention is in how telephone numbers are assigned and handled. With PBX, each extension has either a separate direct dial number or an extension number. For example, to dial a particular business number serviced by a PBX system, a caller must dial a unique phone number (or extension), which is assigned to a particular phone, or a group of phones. In either case,

particular telephone lines, both internal and external to the PBX system, are not fixedly associated with any particular telephone number. For example, a PBX may have 30 available external lines and over 200 internal extensions. So whenever a caller serviced by the PBX dials an outside number, they are routed to next available outside line of those thirty, if one is available. Likewise, a person dialing a PBX-serviced number from outside the system is assigned one of the 200+ inside lines, if one is available.

The claimed invention Home network system is different. There is no addressable extension or telephone number associated with the endpoint that is "visible" to the external world. Rather, it is the external lines "delivering" the call that is associated with specific telephone numbers. For example, a Home network system may have two external lines, say XXX-XXX-8711 and 8712. Telephones are rung in response to the external telephone line on which a call is received. The gateway acts as an intermediary, and only rings endpoints that are associated with a specific outside line. So, the number 8711 may be set to only ring an office/den phone and a cordless kitchen phone. But, 8712 might ring every phone in the house. In a PBX system, the telephone numbers are associated with particular telephones. To reach the kitchen phone in a conventional system, the caller must know the phone number associated with that particular phone, say 8711. In the Applicant's invention, there is no such correlation between a particular phone and a particular phone number. In the Applicant's system a caller dials a phone number (selects an external line). However, he has no control over the endpoint(s) to which his call is bridged. Nor does the caller need to know that information. The bridging configurations between external lines and endpoints are made selectable in the Home Network environment.

This type of configuration permits the privacy and public mode options to be independently selected for each external telephone line, as recited in claim 1. The difference between the claimed invention and the PBX system is subtle, but powerful enough to enable unique privacy and public mode options.

The claimed invention privacy and public mode functions are enabled because the telephone numbers are associated with external lines, as opposed to internal phones. If number 8711 is set to private, and the office/den phone is initially picked up, then the cordless kitchen phone is blocked from picking up and eavesdropping (vice versa scenario applies). If the 8711 number is set to public mode, either phone may join the call, regardless of which phone initially takes the call. To the best of my knowledge, this a function that is unique to the claimed invention, based on a novel use of a gateway to identify a telephone number with an external line, instead of with a particular phone, or particular group of phones.

8. In summary, I am unable to determine the signaling system that Kung uses to communicate between his residential gateway and the CPE telephones. As I mentioned above, he appears to be using his residential gateway to mimic conventional PBX functions. However, it is unnecessary to make that assumption. It is only necessary to assume that Kung associates telephone numbers with particular telephones, as is the standard behavior in any conventional POTS, PBX, digital, or gateway phone system that I am aware of. Alternately considered, no assumptions need be made. Since Kung does not describe the organization of telephone numbers on the basis of external lines, his gateway cannot enable the claimed privacy/public mode functions.

9. I have been asked to consider whether the combination of the Wahi and Kung references make the claimed invention obvious, or suggest some sort of modification that makes the claimed invention obvious. The short answer is that they do not. Wahi's telephone system and switching mechanism clearly cannot enable or suggest the privacy/public mode functions of the claimed invention. The combination of Wahi and Kung suggests to me a gateway-enabled lockout system, which additionally performs some transfer and conferencing functions. However as mentioned above, without the present invention organization of telephone numbers against external telephone lines, the claimed invention cannot be practiced. I see nothing in either reference, or in the combination of references that suggests a system that could support the privacy/public mode functions described in the claimed invention.

10. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United State Code and that such willful, false statements may jeopardize the validity of the application or any patent issuing thereon.

Oct. 8, 2002

Date

K. Srinivas

Srinivas Kandala